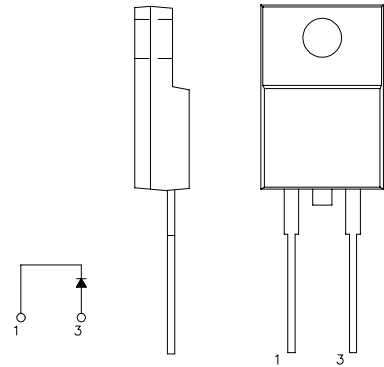


# FRD Type : FSF05A40

## OUTLINE DRAWING

### FEATURES

- \* Fully Molded Isolation Case
- \* Ultra – Fast Recovery
- \* Low Forward Voltage Drop
- \* Low Power Loss, High Efficiency
- \* High Surge Capability
- \* 200 Volts thru 600 Volts Types Available



### Maximum Ratings

Approx Net Weight:1.7g

| Rating                               | Symbol       | FSF05A40      |   | Unit             |
|--------------------------------------|--------------|---------------|---|------------------|
| Repetitive Peak Reverse Voltage      | $V_{RRM}$    | 400           |   | V                |
| Non-repetitive Peak Reverse Voltage  | $V_{RSM}$    | 440           |   |                  |
| Average Rectified Output Current     | $I_O$        | 5             | $T_c=118^\circ\text{C}$ 50 Hz Half Sine Wave Resistive Load | A                |
| RMS Forward Current                  | $I_{F(RMS)}$ | 7.85          |   | A                |
| Surge Forward Current                | $I_{FSM}$    | 80            | 50 Hz Half Sine Wave, 1cycle Non-repetitive                 | A                |
| Operating Junction Temperature Range | $T_{jw}$     | - 40 to + 150 |   | $^\circ\text{C}$ |
| Storage Temperature Range            | $T_{stg}$    | - 40 to + 150 |   | $^\circ\text{C}$ |
| Mounting torque                      |              | 0.5           | Recommended value   | N.m              |

### Electrical • Thermal Characteristics

| Characteristics       | Symbol        | Conditions  | Min. | Typ. | Max. | Unit                      |
|-----------------------|---------------|---|------|------|------|---------------------------|
| Peak Reverse Current  | $I_{RM}$      | $T_j= 25^\circ\text{C}$ , $V_{RM}= V_{RRM}$   | -    | -    | 30   | $\mu\text{A}$             |
| Peak Forward Voltage  | $V_{FM}$      | $T_j= 25^\circ\text{C}$ , $I_{FM}= 5\text{A}$   | -    | -    | 1.25 | V                         |
| Reverse Recovery Time | $t_{rr}$      | $I_{FM}= 5\text{A}$ ,<br>$-di/dt= 50 \text{ A}/\mu\text{s}$ , $T_a= 25^\circ\text{C}$ | -    | -    | 45   | ns                        |
| Thermal Resistance    | $R_{th(j-c)}$ | Junction to Case  | -    | -    | 5    | $^\circ\text{C}/\text{W}$ |
|                       | $R_{th(c-f)}$ | Case to Fin   | -    | -    | 1.5  |                           |

FSF05A40 OUTLINE DRAWING (Dimensions in mm)

